STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/910,208C_

Source: _1Fw/6_

Date Processed by STIC: _12/7/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _09/9/0, 208C_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2____Invalid Line Length — The rules require that a line **not exceed 72 characters** in length. This includes white spaces.

3____Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

4____Non-ASCII — The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5____Variable Length — Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7____Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8____Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000

9____Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213> Response — Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence. (see item 11 below)

11____Use of <220> — Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules

12____PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____Misuse of n/Xaa — "n" can **only** represent a single <u>nucleotide</u>; "Xaa" can **only** represent a single <u>amino acid</u>

AMC – STIC Systems Branch – 03/02/06

IFW16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/910,208C

DATE: 12/07/2006
TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt
Output Set: N:\CRF4\12072006\I910208C.raw

see pp 1, 5

Does Not Comply
Corrected Diskette Needed

```
 3 <110> APPLICANT: Hitomi, Jiro
 4        Yamamura, Tokujiro
 5        Kimura, Tatsuji
 6        Yamaguchi, Ken
 8 <120> TITLE OF INVENTION: Novel Calcium-Binding Proteins
10 <130> FILE REFERENCE: MM4454
12 <140> CURRENT APPLICATION NUMBER: 09/910,208C
13 <141> CURRENT FILING DATE: 2001-07-20
15 <160> NUMBER OF SEQ ID NOS: 20
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 429
21 <212> TYPE: DNA
22 <213> ORGANISM: calcium binding protein
25 <220> FEATURE:
26 <221> NAME/KEY: exon
27 <222> LOCATION: (48)..(323)
28 <223> OTHER INFORMATION: Amino acid sequence of calcium-binding protein from bovine
29        amniotic fluid
31 <400> SEQUENCE: 1
32 ctggcattcc acacttctgt gcagaggggt gaacgtagtt tggtaaa atg act aag        56
33                                                    Met Thr Lys
34                                                     1
36 ctg gaa gat cac ctg gag gga atc atc aac atc ttc cac cag tac tcc        104
37 Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr Ser
38     5                   10                  15
40 gtt cgg gtg ggg cat ttc gac acc ctc aac aag cgt gag ctg aag cag        152
41 Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys Gln
42 20                  25                  30                  35
44 ctg atc aca aag gaa ctt ccc aaa acc ctc cag aac acc aaa gat caa        200
45 Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln
46                 40                  45                  50
48 cct acc att gac aaa ata ttc caa gac ctg gat gcc gat aaa gac gga        248
49 Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly
50                 55                  60                  65
52 gcc gtc agc ttt gag gaa ttc gta gtc ctg gtg tcc agg gtg ctg aaa        296
53 Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu Lys
54         70                  75                  80
56 aca gcc cac ata gat atc cac aaa gag taggaagctc tttccagcaa            343
57 Thr Ala His Ile Asp Ile His Lys Glu
58     85                  90
60 tgtccccaag aagacttacc cttctcctcc ctgaggctgc cttacccgag ggaagagaga    403
62 attaataaac gtactttggc aaagtt                                         429
```

invalid response - see item 10 on Error Summary Sheet

If this is an Artificial Sequence, give sources of genetic material in <2207-<2237 section

RAW SEQUENCE LISTING   DATE: 12/07/2006
PATENT APPLICATION: US/09/910,208C   TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt
Output Set: N:\CRF4\12072006\I910208C.raw

```
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 50
67 <212> TYPE: PRT
68 <213> ORGANISM: Bos taurus
70 <400> SEQUENCE: 2
72 Thr Lys Leu Glu His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr
73 1               5                   10                  15
76 Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys
77             20                  25                  30
80 Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp
81          35                  40                  45
84 Gln Pro
85      50
88 <210> SEQ ID NO: 3
89 <211> LENGTH: 8
90 <212> TYPE: PRT
91 <213> ORGANISM: Bos taurus
93 <400> SEQUENCE: 3
95 Ile Phe Gln Asp Leu Asp Ala Asp
96 1               5
99 <210> SEQ ID NO: 4
100 <211> LENGTH: 12
101 <212> TYPE: PRT
102 <213> ORGANISM: Bos taurus
104 <400> SEQUENCE: 4
106 Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu
107 1               5                   10
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 9
112 <212> TYPE: PRT
113 <213> ORGANISM: Bos taurus
115 <400> SEQUENCE: 5
117 Thr Ala His Ile Asp Ile His Lys Glu
118 1               5
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 31
123 <212> TYPE: PRT
124 <213> ORGANISM: Bos taurus
126 <400> SEQUENCE: 6
128 Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln Pro Thr Ile Asp Lys
129 1               5                   10                  15
132 Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly Ala Val Ser Phe
133             20                  25                  30
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 20
138 <212> TYPE: PRT
139 <213> ORGANISM: Bos taurus
141 <400> SEQUENCE: 7
143 Glu Phe Val Val Leu Val Ser Arg Val Leu Lys Arg Ala His Ile Asp
```

```
144 1               5                   10                  15
147 Ile His Lys Glu
148             20
151 <210> SEQ ID NO: 8
152 <211> LENGTH: 20
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial
156 <220> FEATURE:
157 <223> OTHER INFORMATION: sense primer
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (3)..(3)
163 <223> OTHER INFORMATION: n is a, c, g or t
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (15)..(15)
168 <223> OTHER INFORMATION: n is a, c, g, or t
170 <400> SEQUENCE: 8
```
W--> 171 ttngargayc ayytngargg   20
```
174 <210> SEQ ID NO: 9
175 <211> LENGTH: 20
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial
179 <220> FEATURE:
180 <223> OTHER INFORMATION: antisense primer
183 <220> FEATURE:
184 <221> NAME/KEY: misc_feature
185 <222> LOCATION: (18)..(18)
186 <223> OTHER INFORMATION: n is a, c, g, or t
188 <400> SEQUENCE: 9
```
W--> 189 ttrtgdatrt cdatrtgngc   20
```
192 <210> SEQ ID NO: 10
193 <211> LENGTH: 23
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial
197 <220> FEATURE:
198 <223> OTHER INFORMATION: forward primer
200 <400> SEQUENCE: 10
201 ggtggcacga ctcctggagc ccg                            23
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 24
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial
209 <220> FEATURE:
210 <223> OTHER INFORMATION: reverse primer
212 <400> SEQUENCE: 11
213 ttgacaccag accaactggt aatg                           24
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 440
```

RAW SEQUENCE LISTING   DATE: 12/07/2006
PATENT APPLICATION: **US/09/910,208C**   TIME: 08:54:18

Input Set : **F:\MM4454.ST25.txt**
Output Set: **N:\CRF4\12072006\I910208C.raw**

218 <212> TYPE: DNA   *OK because source is listed*
219 <213> ORGANISM: human calcium-binding protein
222 <220> FEATURE: ───
223 <221> NAME/KEY: exon
224 <222> LOCATION: (22)..(297)
225 <223> OTHER INFORMATION: Deduced amino acid sequence for human calcium-binding
protein
227 <400> SEQUENCE: 12
228 ggttaacatt aggctgggaa g atg aca aaa ctt gaa gag cat ctg gag gga   51
229   Met Thr Lys Leu Glu Glu His Leu Glu Gly
230   1   5   10
232 att gtc aat atc ttc cac caa tac tca gtt cgg aag ggg cat ttt gac   99
233 Ile Val Asn Ile Phe His Gln Tyr Ser Val Arg Lys Gly His Phe Asp
234   15   20   25
236 acc ctc tct aag ggt gag ctg aag cag ctg ctt aca aag gag ctt gca   147
237 Thr Leu Ser Lys Gly Glu Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala
238   30   35   40
240 aac acc atc aag aat atc aaa gat aaa gct gtc att gat gaa ata ttc   195
241 Asn Thr Ile Lys Asn Ile Lys Asp Lys Ala Val Ile Asp Glu Ile Phe
242   45   50   55
244 caa ggc ctg gat gct aat caa gat gaa cag gtc gac ttt caa gaa ttc   243
245 Gln Gly Leu Asp Ala Asn Gln Asp Glu Gln Val Asp Phe Gln Glu Phe
246   60   65   70
248 ata tcc ctg gta gcc att gcg ctg aag gct gcc cat tac cac acc cac   291
249 Ile Ser Leu Val Ala Ile Ala Leu Lys Ala Ala His Tyr His Thr His
250 75   80   85   90
252 aaa gag taggtagctc tctgaagctt tttacccagc aatgtcctca atgagggtct   347
253 Lys Glu
256 tttctttccc tcaccaaaac ccagccttgc ccgtggggag taagagttaa taaacacact   407
258 cacgaaaagt taaaaaaaaa aaaaaaaaat tct   440
261 <210> SEQ ID NO: 13
262 <211> LENGTH: 20
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial
266 <220> FEATURE:
267 <223> OTHER INFORMATION: sense primer
269 <400> SEQUENCE: 13
270 actatcaaca tcttccacca   20
273 <210> SEQ ID NO: 14
274 <211> LENGTH: 20
275 <212> TYPE: DNA
276 <213> ORGANISM: artificial
278 <220> FEATURE:
279 <223> OTHER INFORMATION: antisense primer
281 <400> SEQUENCE: 14
282 tctttatcgg catccaggtc   20
285 <210> SEQ ID NO: 15
286 <211> LENGTH: 15
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial

RAW SEQUENCE LISTING   DATE: 12/07/2006
PATENT APPLICATION: US/09/910,208C   TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt
Output Set: N:\CRF4\12072006\I910208C.raw

```
290 <220> FEATURE:
291 <223> OTHER INFORMATION: primer PMN.HP7S 1-15
293 <400> SEQUENCE: 15
294 tactcagttc ggaag                                             15
297 <210> SEQ ID NO: 16
298 <211> LENGTH: 15
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial
302 <220> FEATURE:
303 <223> OTHER INFORMATION: primer PMN.HP7A 126-112
305 <400> SEQUENCE: 16
306 ttggaatatt tcatc                                             15
309 <210> SEQ ID NO: 17
310 <211> LENGTH: 20
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial
314 <220> FEATURE:
315 <223> OTHER INFORMATION: primer HP7S 7-26
317 <400> SEQUENCE: 17
318 acattaggct gggaagatga                                        20
321 <210> SEQ ID NO: 18
322 <211> LENGTH: 20
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial
326 <220> FEATURE:
327 <223> OTHER INFORMATION: primer HP7A 336-317
329 <400> SEQUENCE: 18
330 ggacattgct gggtaaaaag                                        20
333 <210> SEQ ID NO: 19        same error as page 1
334 <211> LENGTH: 92
335 <212> TYPE: PRT
336 <213> ORGANISM: calcium binding protein
339 <220> FEATURE:
340 <221> NAME/KEY: misc_feature
341 <222> LOCATION: (1)..(92)
342 <223> OTHER INFORMATION: Amino acid sequence of SEQ ID No. 1
344 <400> SEQUENCE: 19
346 Met Thr Lys Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His
347 1               5                   10                  15
350 Glu Tyr Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu
351                 20                  25                  30
354 Leu Lys Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr
355             35                  40                  45
358 Lys Asp Gln Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp
359     50                  55                  60
362 Lys Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg
363 65                  70                  75                  80
366 Val Leu Lys Thr Ala His Ile Asp Ile His Lys Glu
367                 85                  90
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/07/2006
PATENT APPLICATION: **US/09/910,208C**   TIME: 08:54:19

Input Set : **F:\MM4454.ST25.txt**
Output Set: **N:\CRF4\12072006\I910208C.raw**

Please Note:
**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:8; N Pos. 3,15
Seq#:9; N Pos. 18

Invalid <213> Response:
**Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.**

Seq#:8,9,10,11,13,14,15,16,17,18

VERIFICATION SUMMARY   DATE: 12/07/2006
PATENT APPLICATION: **US/09/910,208C**   TIME: 08:54:19

Input Set : **F:\MM4454.ST25.txt**
Output Set: **N:\CRF4\12072006\I910208C.raw**

L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0